-continued

```
Gly Ile Asn Ile Pro Val Asp Gly Gly Leu Ala Ser Thr Tyr Val
                245                 250                 255


<210> SEQ ID NO 43
<211> LENGTH: 26
<212> TYPE: DNA
<213> ORGANISM: not required under old rule

<400> SEQUENCE: 43

atgcarctbs cbsayaaraa ratyyt                                        26


<210> SEQ ID NO 44
<211> LENGTH: 20
<212> TYPE: PRT
<213> ORGANISM: not required under old rule
<220> FEATURE:
<221> NAME/KEY: UNSURE
<222> LOCATION: (12)
<221> NAME/KEY: UNSURE
<222> LOCATION: (13)..(19)

<400> SEQUENCE: 44

Met Gln Leu Thr Asn Lys Lys Ile Val Val Val Xaa Val Xaa Xaa Xaa
  1               5                  10                  15

Xaa Xaa Xaa Xaa
            20


<210> SEQ ID NO 45
<211> LENGTH: 20
<212> TYPE: PRT
<213> ORGANISM: not required under old rule
<220> FEATURE:
<221> NAME/KEY: UNSURE
<222> LOCATION: (20)

<400> SEQUENCE: 45

Ser Ile Leu Gly Leu Asn Gly Ala Pro Val Gly Ala Glu Gln Leu Gly
  1               5                  10                  15

Ser Ala Leu Xaa
            20
```

What is claimed is:

1. An isolated eugenol hydroxylase comprising two subunits wherein one subunit comprises a cytochrome C which is encoded by SEQ ID NO: 11 and wherein the second subunit comprises a flavoprotein which is encoded by SEQ ID NO: 15.

2. An isolated DNA coding for the enzyme according to claim 1 comprising SEQ ID NO: 11.

3. A cosmid clone comprising an isolated DNA according to claim 2.

4. A vector comprising an isolated DNA according to claim 2.

5. A microorganism transformed with the isolated DNA according to claim 2.

6. A process of converting eugenol to coniferyl alcohol comprising subjecting eugenol to the eugenol hydroxylase according to claim 1 for a period of time sufficient to convert the eugenol to coniferyl alcohol and recovering the alcohol thus formed.

7. An isolated DNA coding for the enzyme according to claim 1 comprising SEQ ID NO: 15.

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